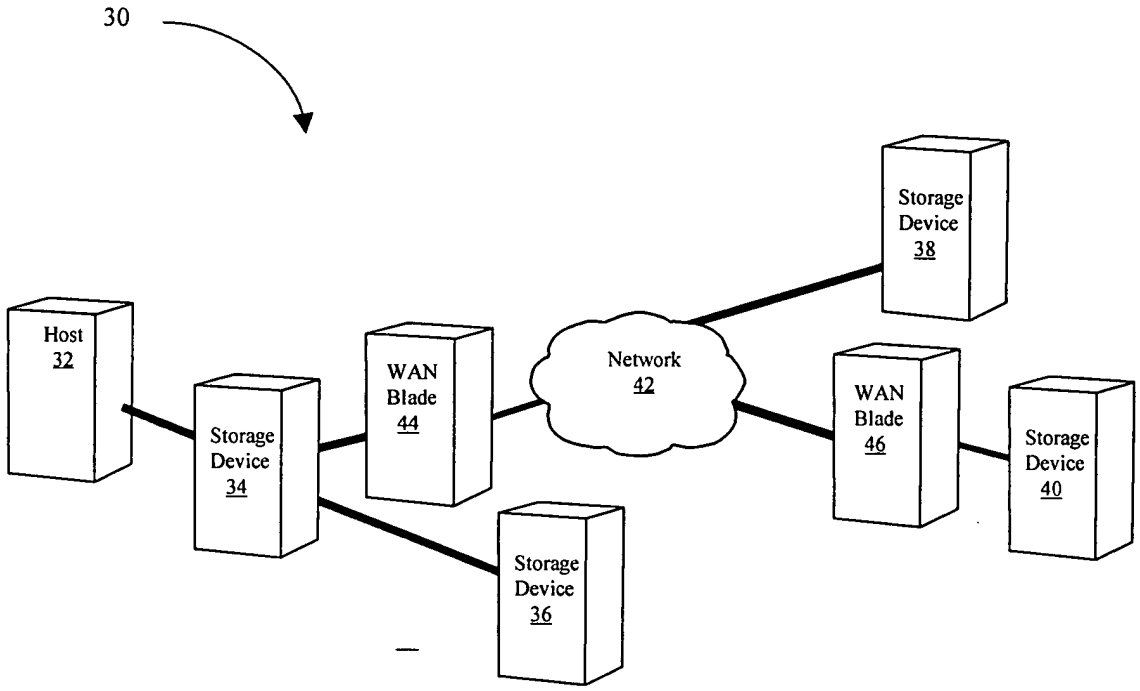

FIGURE 1

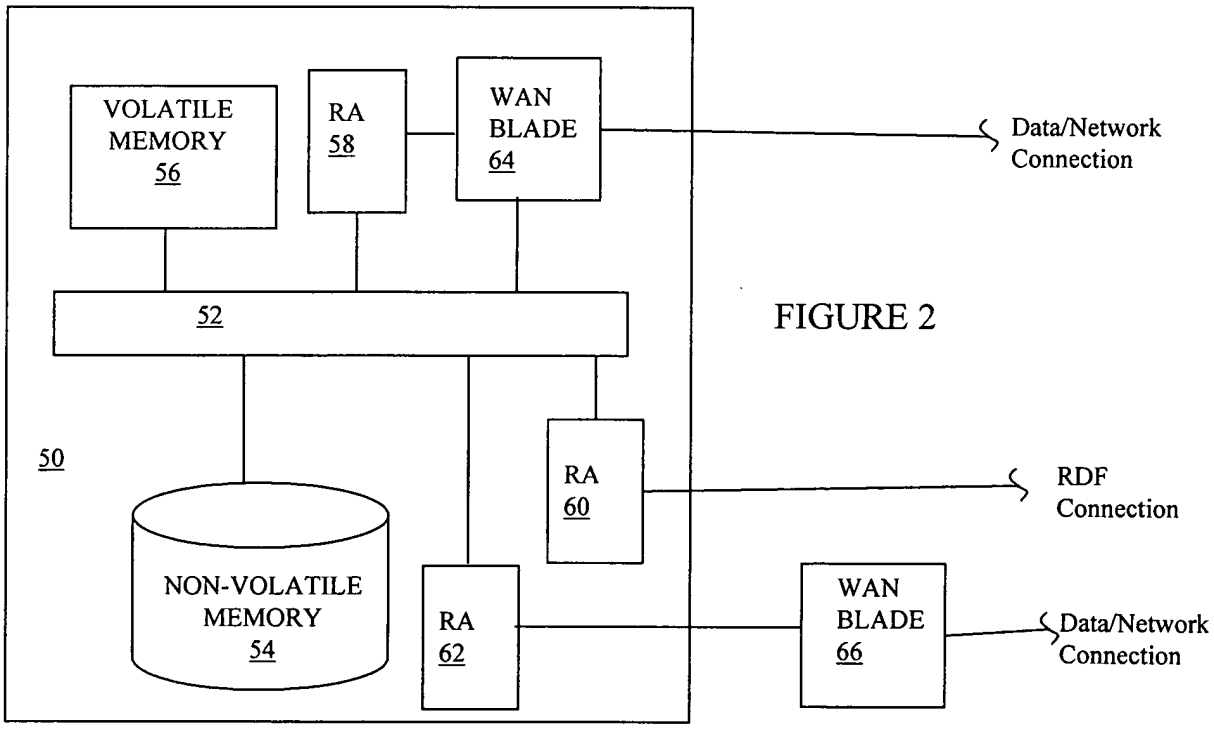

FIGURE 2

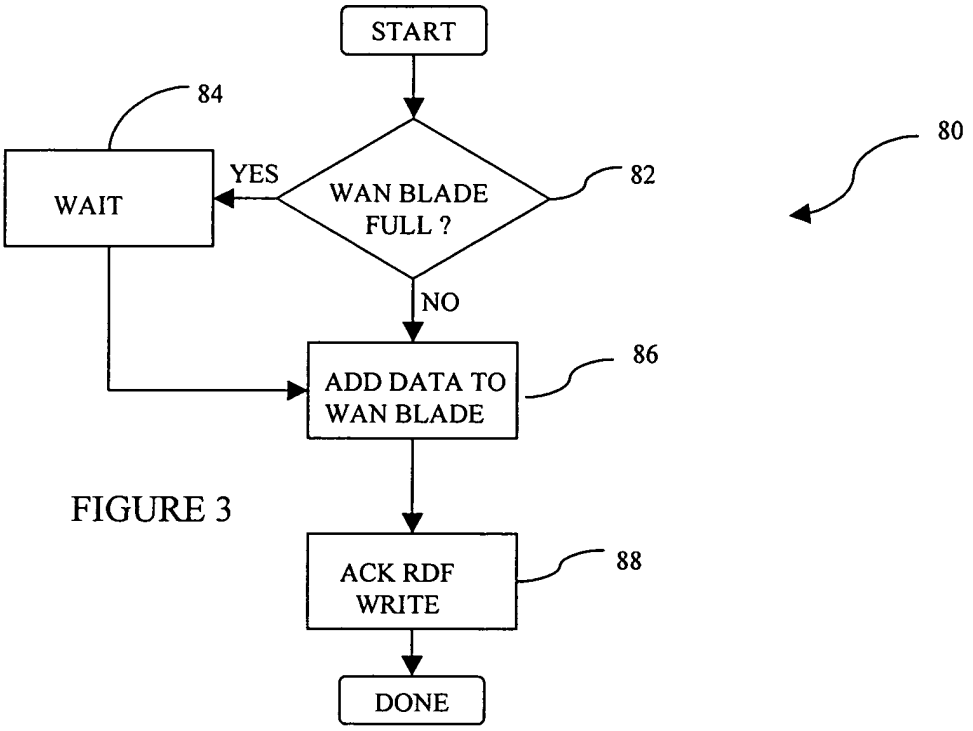

FIGURE 3

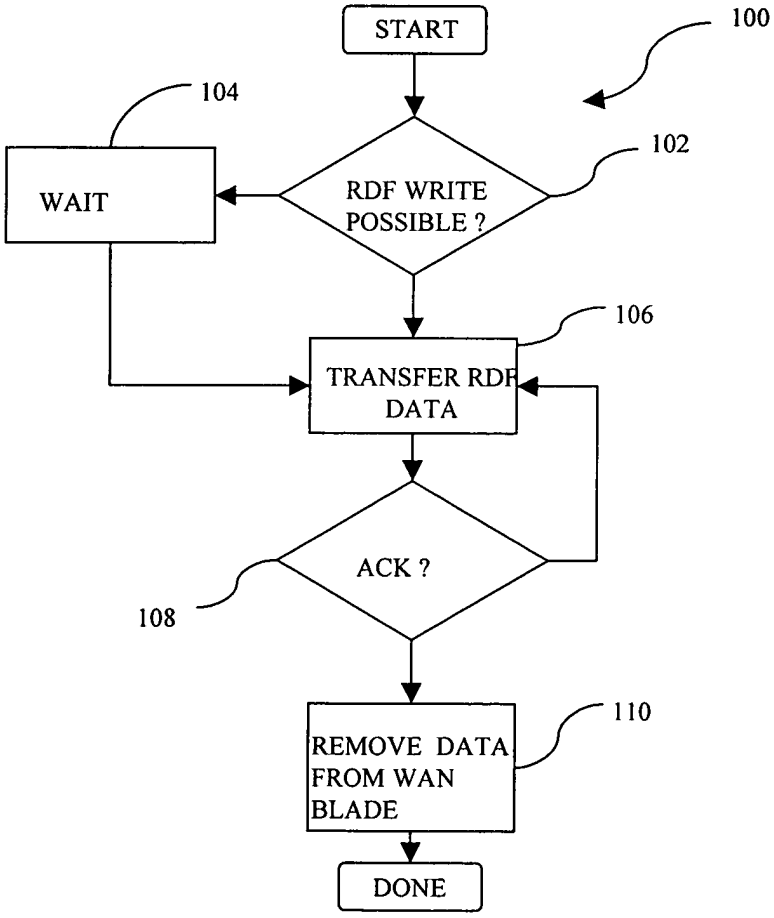

FIGURE 4

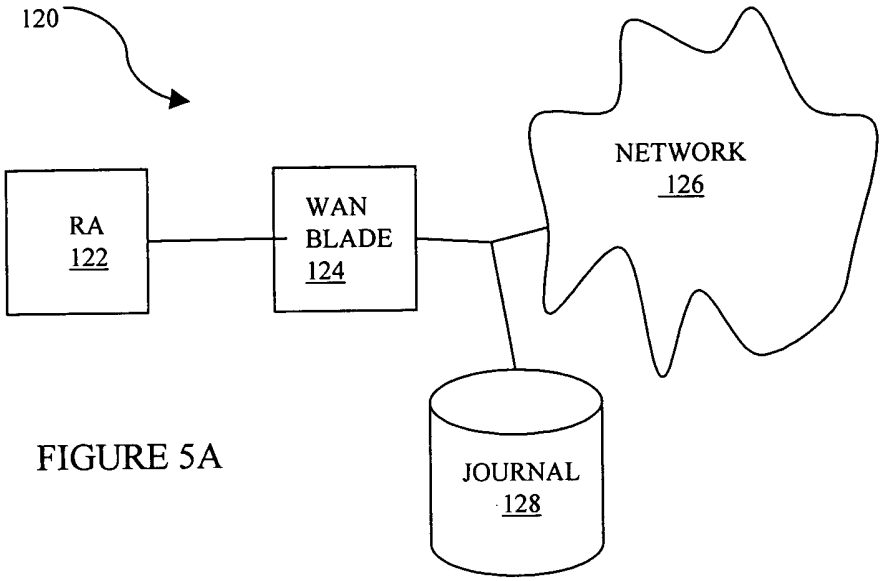

FIGURE 5A

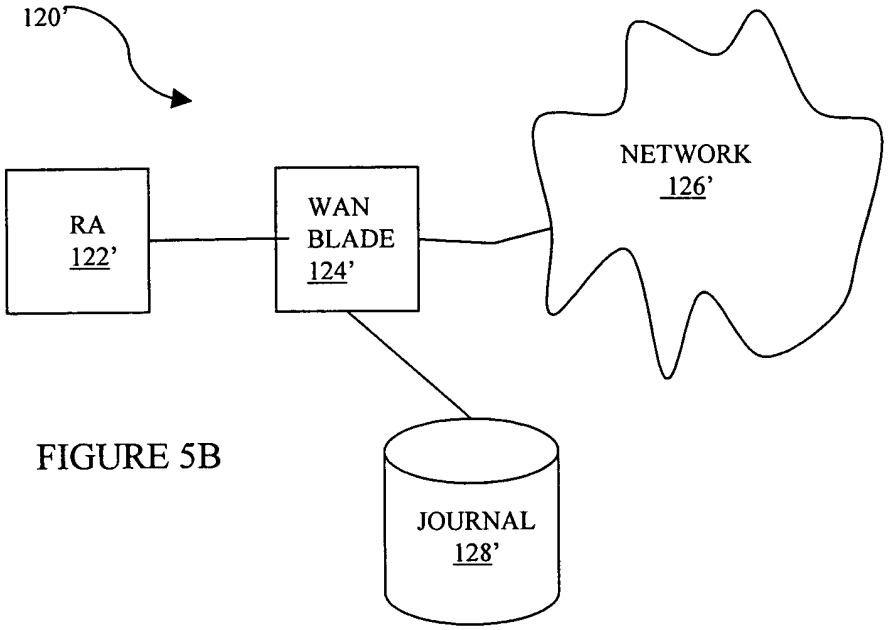

FIGURE 5B

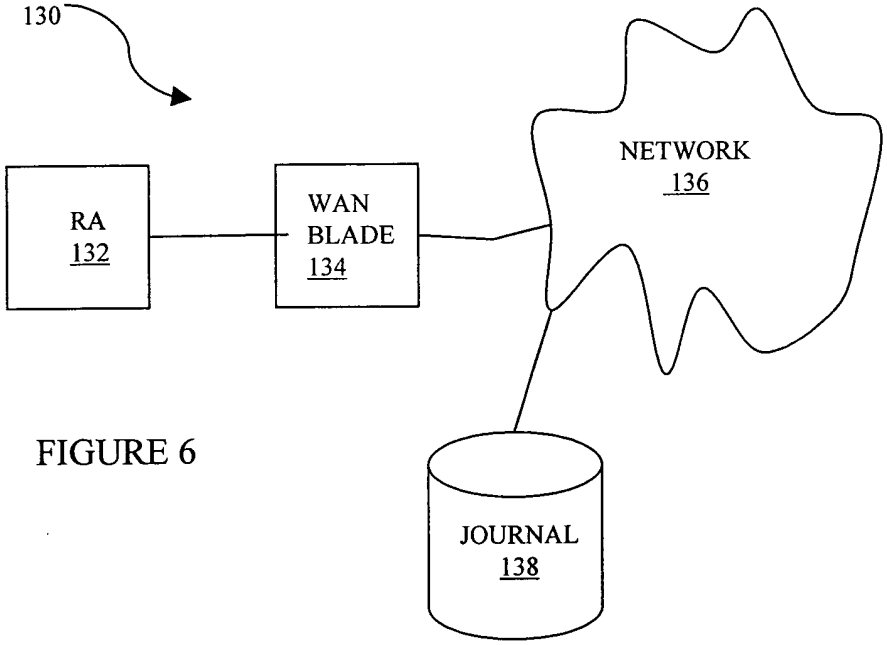

FIGURE 6

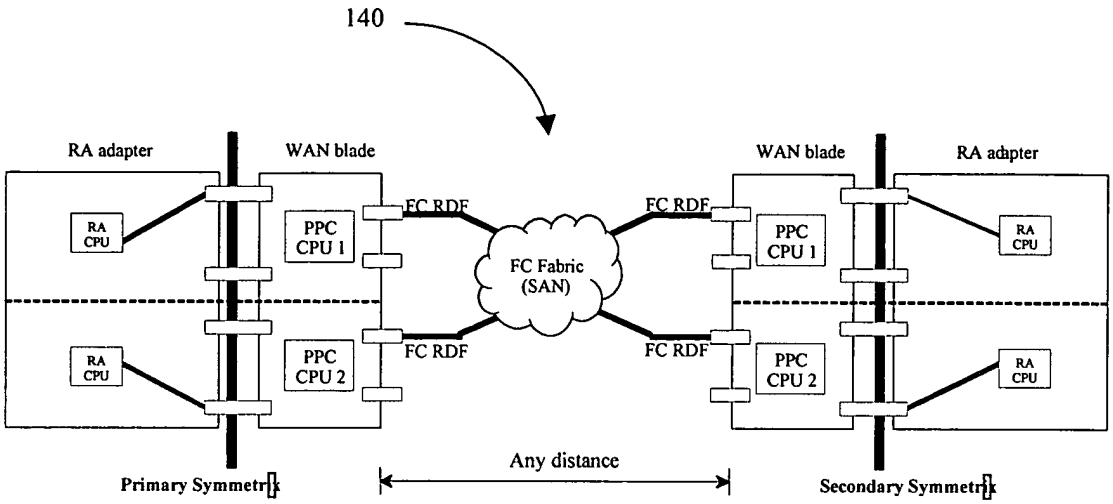

FIGURE 7

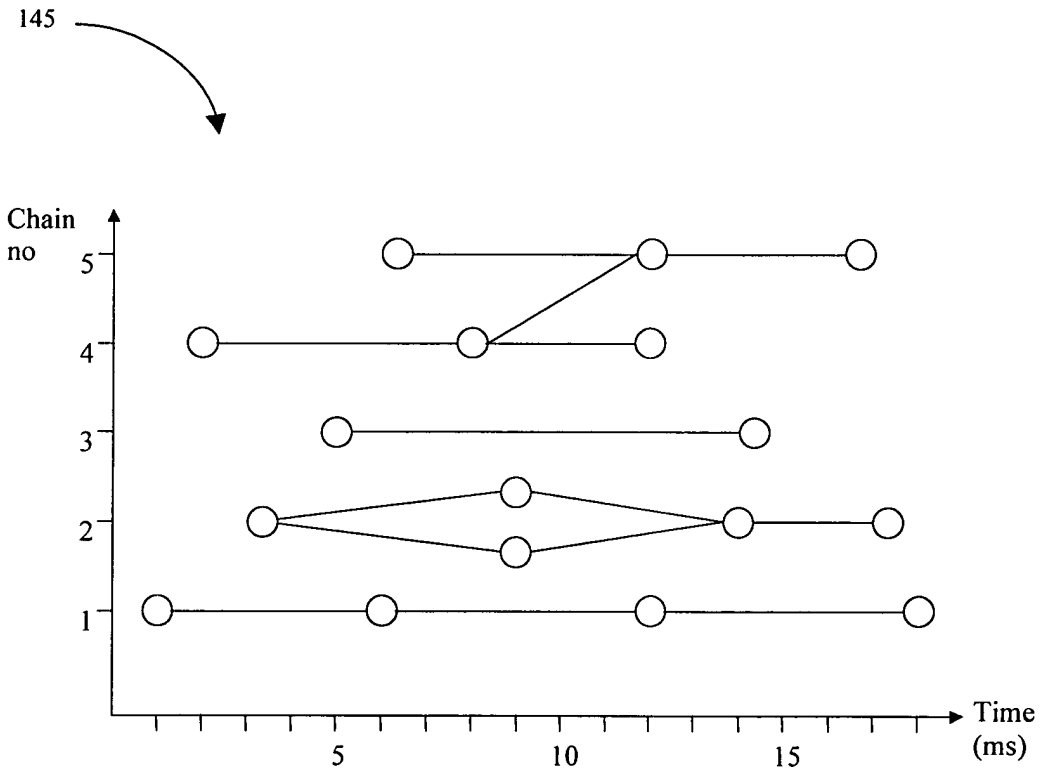

FIGURE 8

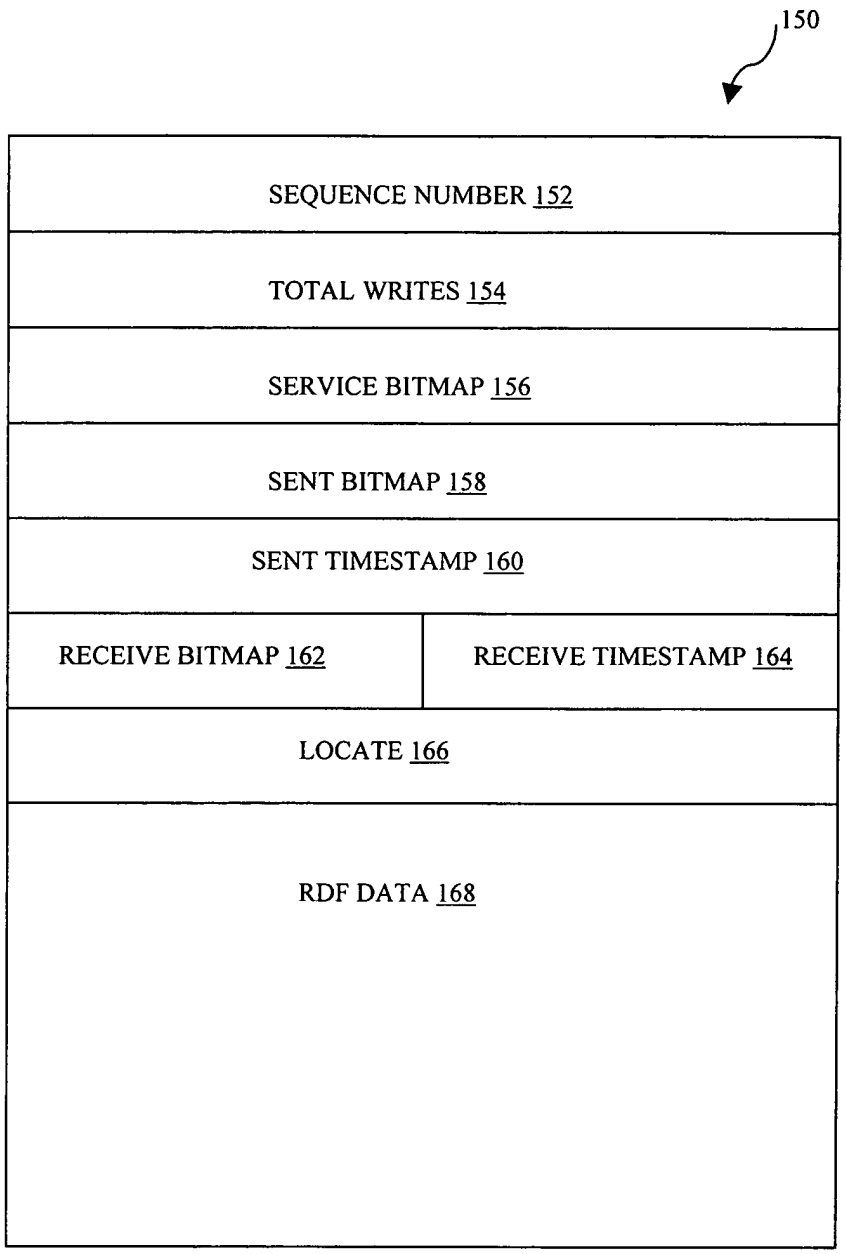
150
SEQUENCE NUMBER 152
TOTAL WRITES 154
SERVICE BITMAP 156
SENT BITMAP 158
SENT TIMESTAMP 160
RECEIVE BITMAP 162
RECEIVE TIMESTAMP 164
LOCATE 166
RDF DATA 168

FIGURE 9

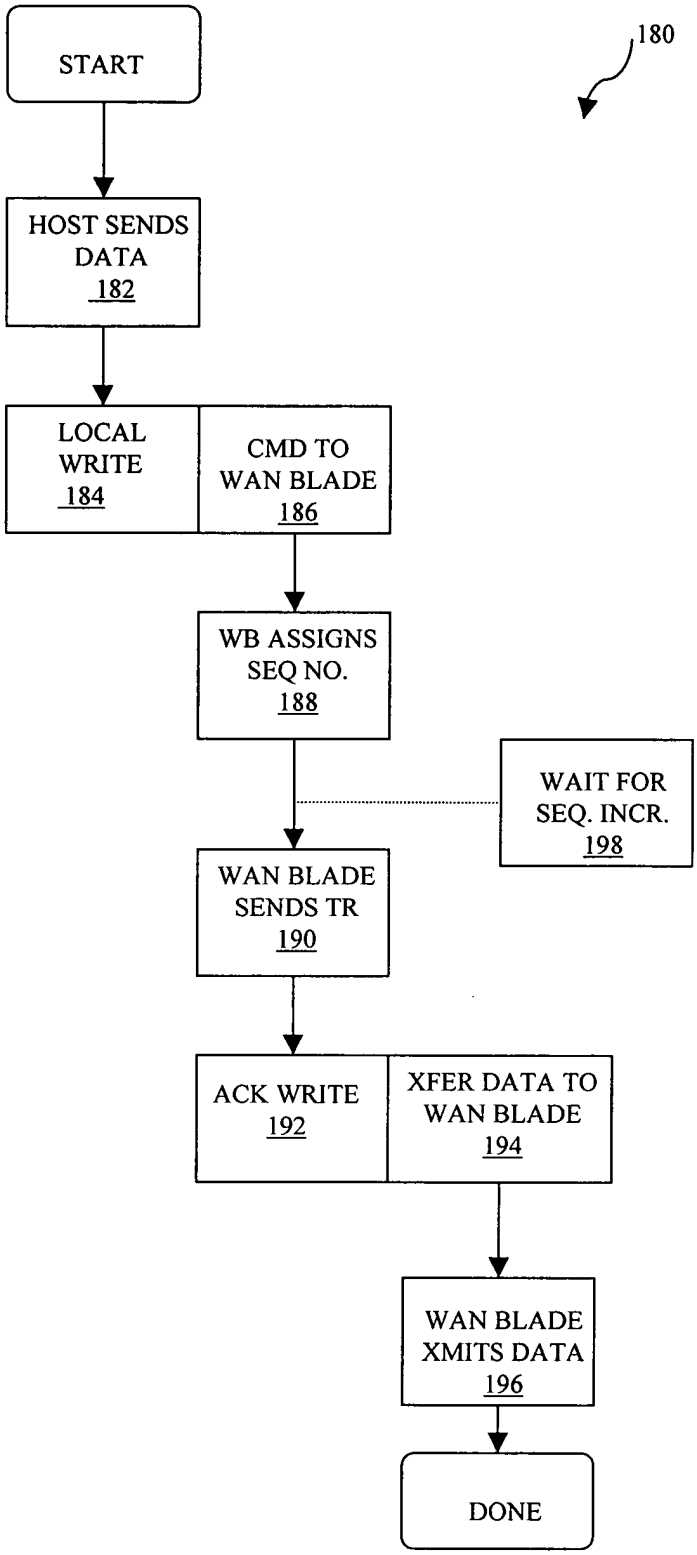
START
180
HOST SENDS DATA 182
LOCAL WRITE 184
CMD TO WAN BLADE 186
WB ASSIGNS SEQ NO. 188
WAIT FOR SEQ. INCR. 198
WAN BLADE SENDS TR 190
ACK WRITE 192
XFER DATA TO WAN BLADE 194
WAN BLADE XMITS DATA 196
DONE

FIGURE 10

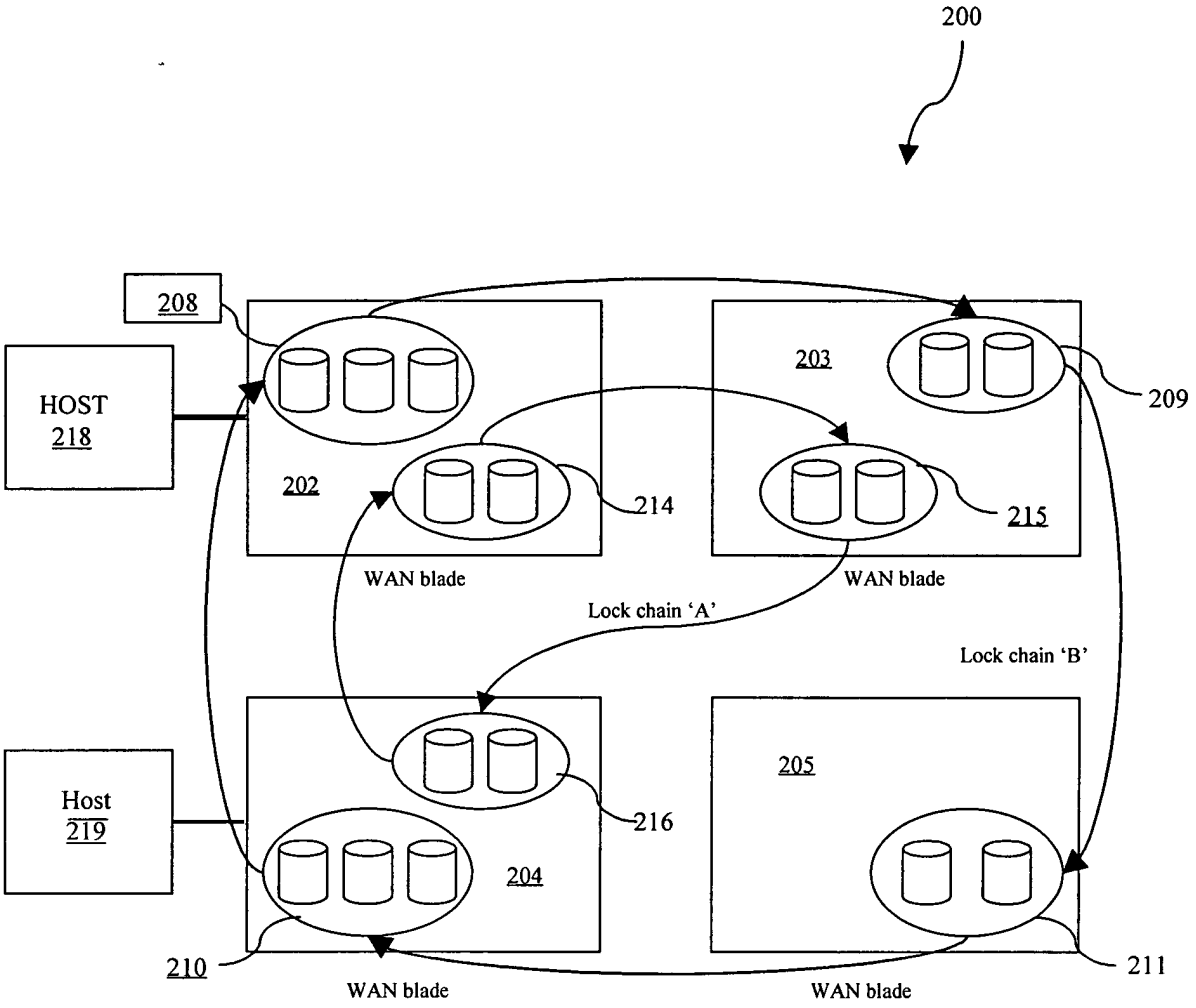
200
208
HOST
218
202
214
203
209
215
WAN blade
WAN blade
Lock chain 'A'
Lock chain 'B'
Host
219
216
204
205
210
211
WAN blade
WAN blade

FIGURE 11

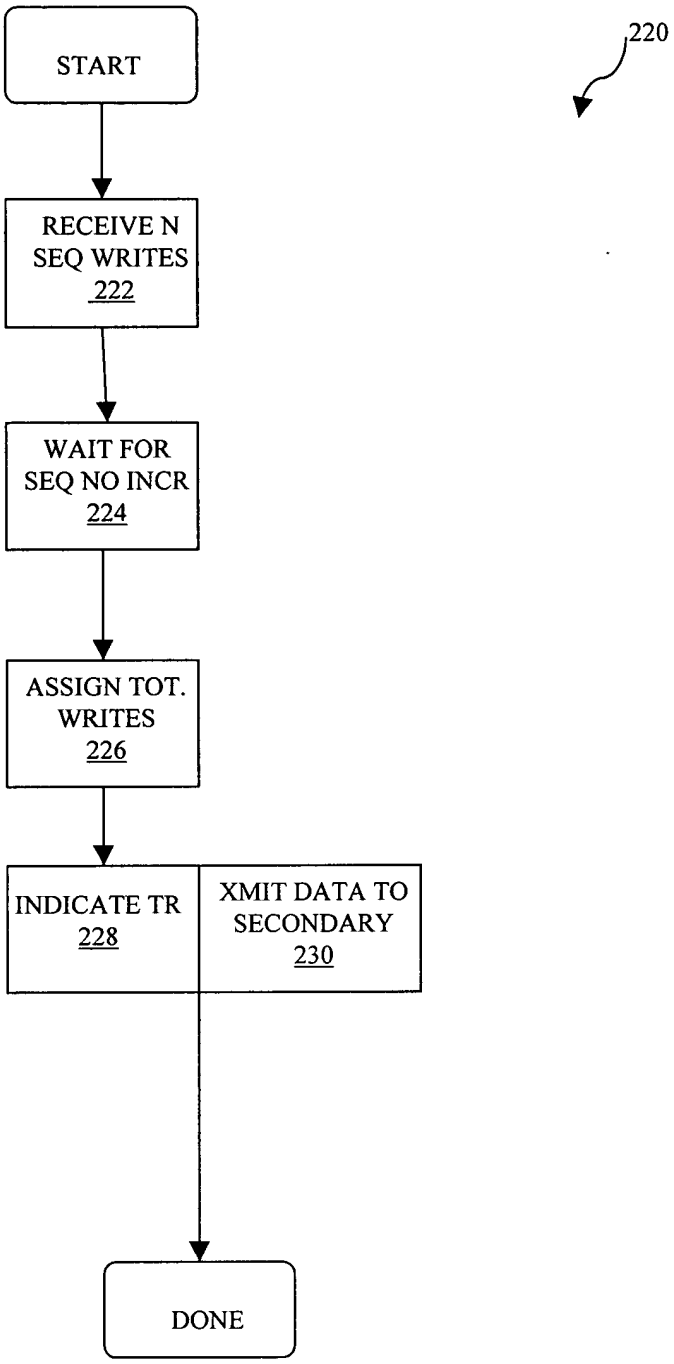
220
START
RECEIVE N SEQ WRITES 222
WAIT FOR SEQ NO INCR 224
ASSIGN TOT. WRITES 226
INDICATE TR 228
XMIT DATA TO SECONDARY 230
DONE

FIGURE 12

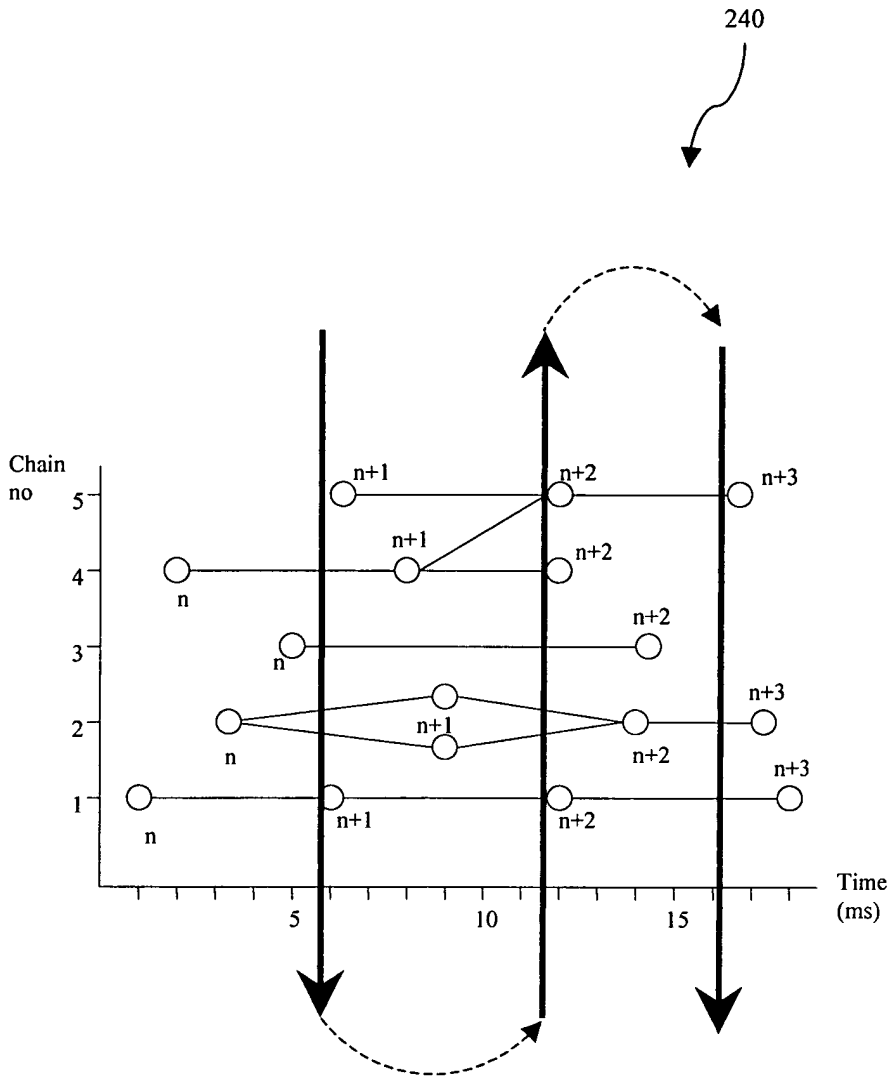

FIGURE 13

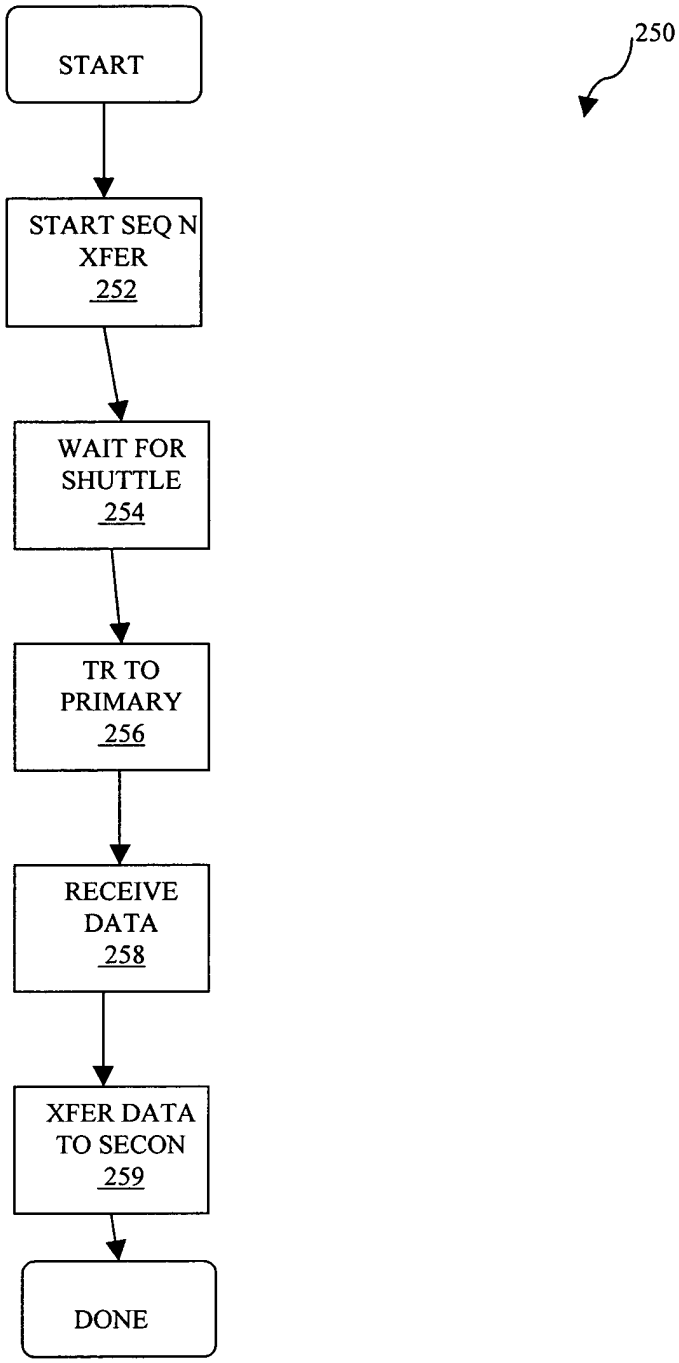
250
START
START SEQ N XFER 252
WAIT FOR SHUTTLE 254
TR TO PRIMARY 256
RECEIVE DATA 258
XFER DATA TO SECON 259
DONE

FIGURE 14

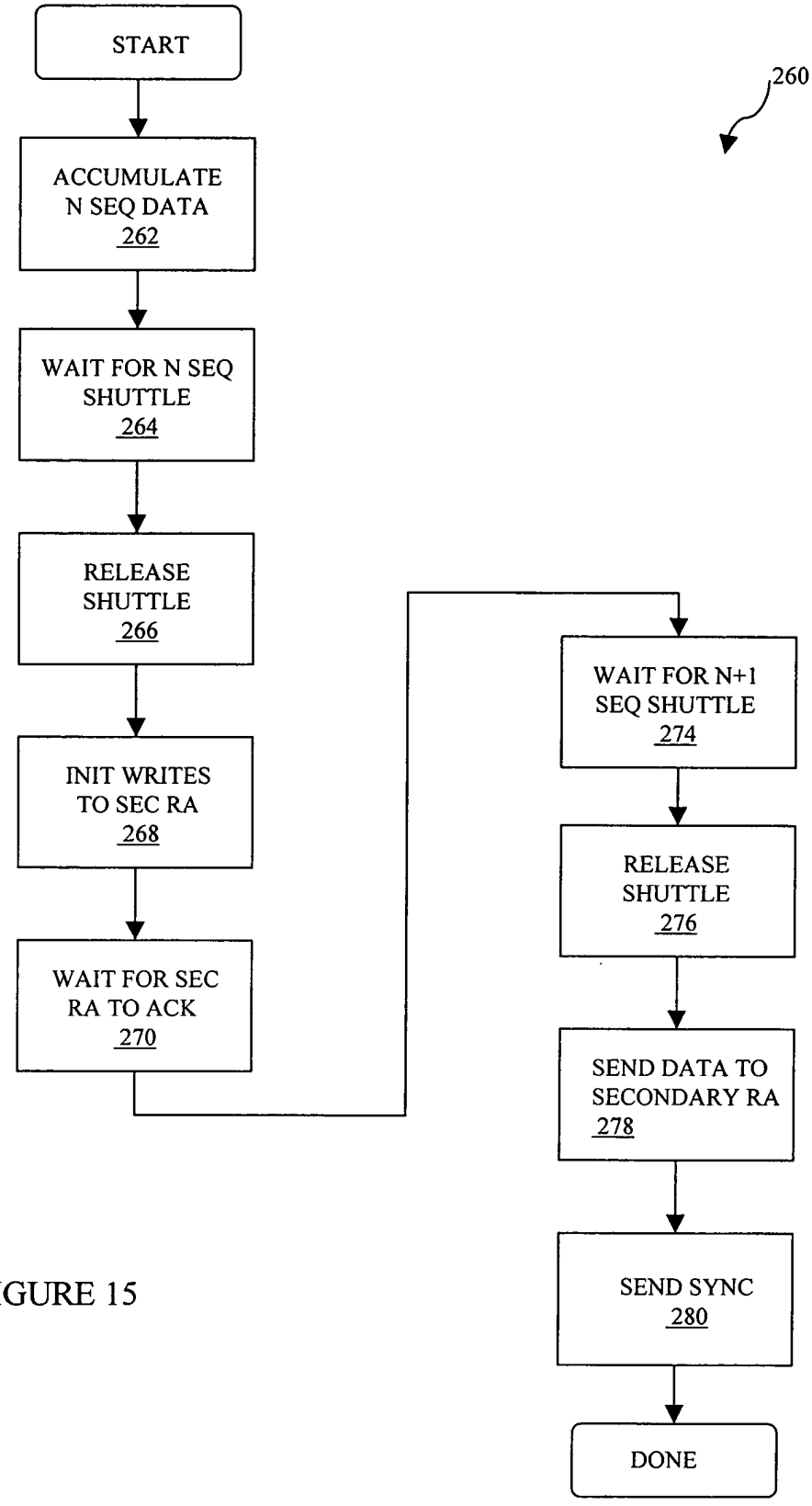
START
260
ACCUMULATE N SEQ DATA 262
WAIT FOR N SEQ SHUTTLE 264
RELEASE SHUTTLE 266
INIT WRITES TO SEC RA 268
WAIT FOR SEC RA TO ACK 270
WAIT FOR N+1 SEQ SHUTTLE 274
RELEASE SHUTTLE 276
SEND DATA TO SECONDARY RA 278
SEND SYNC 280
DONE

FIGURE 15

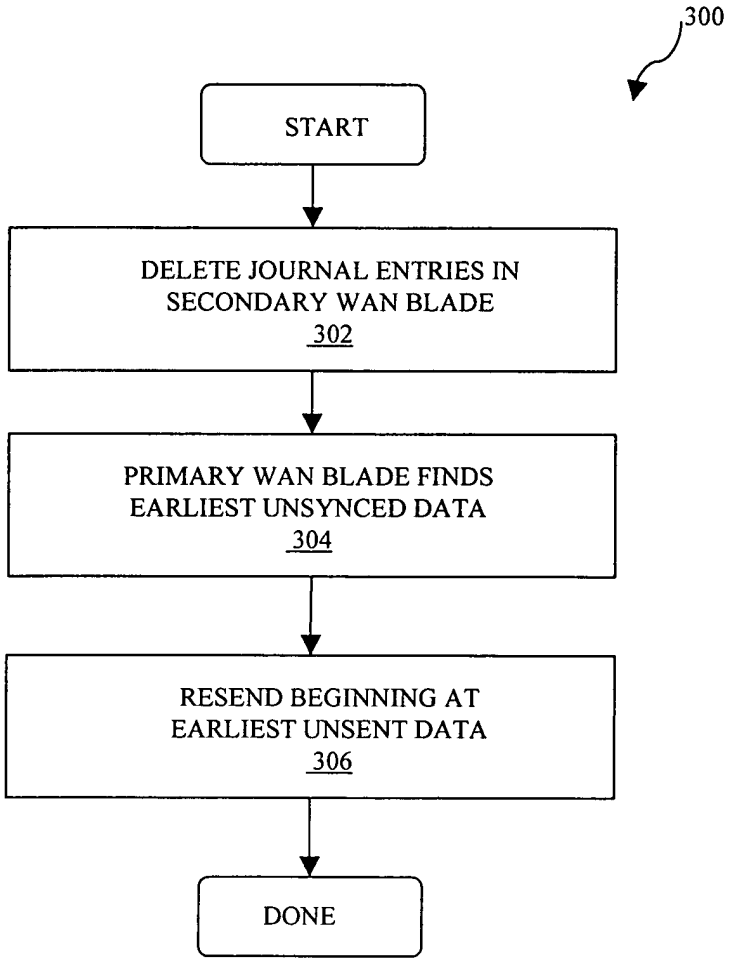
300
START
DELETE JOURNAL ENTRIES IN SECONDARY WAN BLADE
302
PRIMARY WAN BLADE FINDS EARLIEST UNSYNCED DATA
304
RESEND BEGINNING AT EARLIEST UNSENT DATA
306
DONE

FIGURE 16

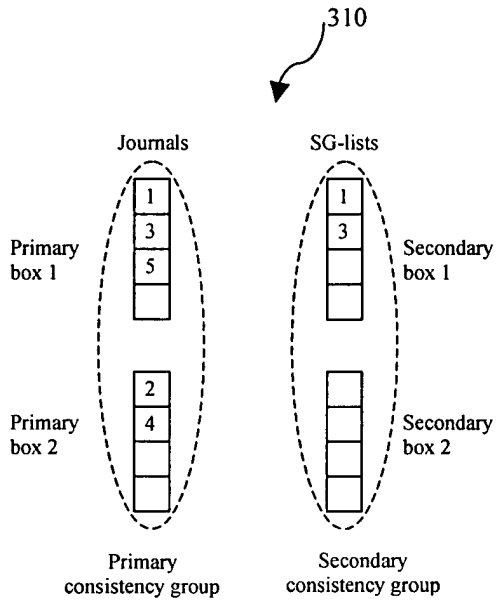

FIGURE 17

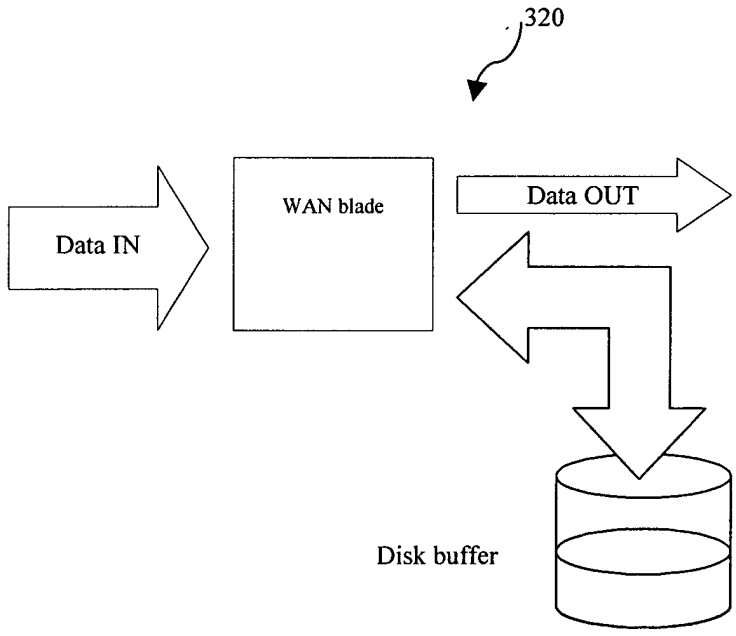

FIGURE 18

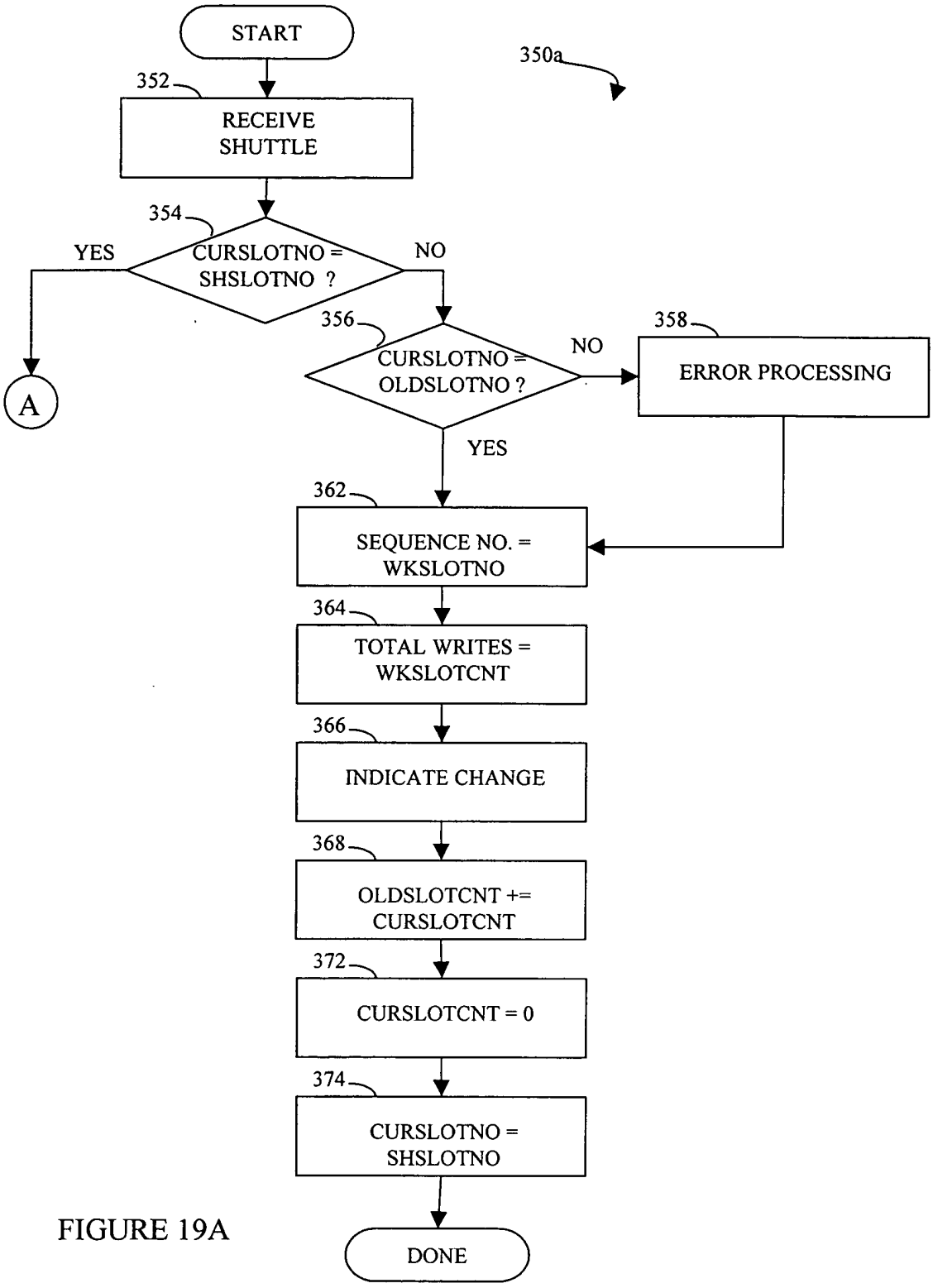
START
350a
352
RECEIVE SHUTTLE
354
CURSLOTNO = SHSLOTNO ?
YES
NO
356
CURSLOTNO = OLDSLOTNO ?
NO
358
ERROR PROCESSING
A
YES
362
SEQUENCE NO. = WKSLOTNO
364
TOTAL WRITES = WKSLOTCNT
366
INDICATE CHANGE
368
OLDSLOTCNT += CURSLOTCNT
372
CURSLOTCNT = 0
374
CURSLOTNO = SHSLOTNO
DONE

FIGURE 19A

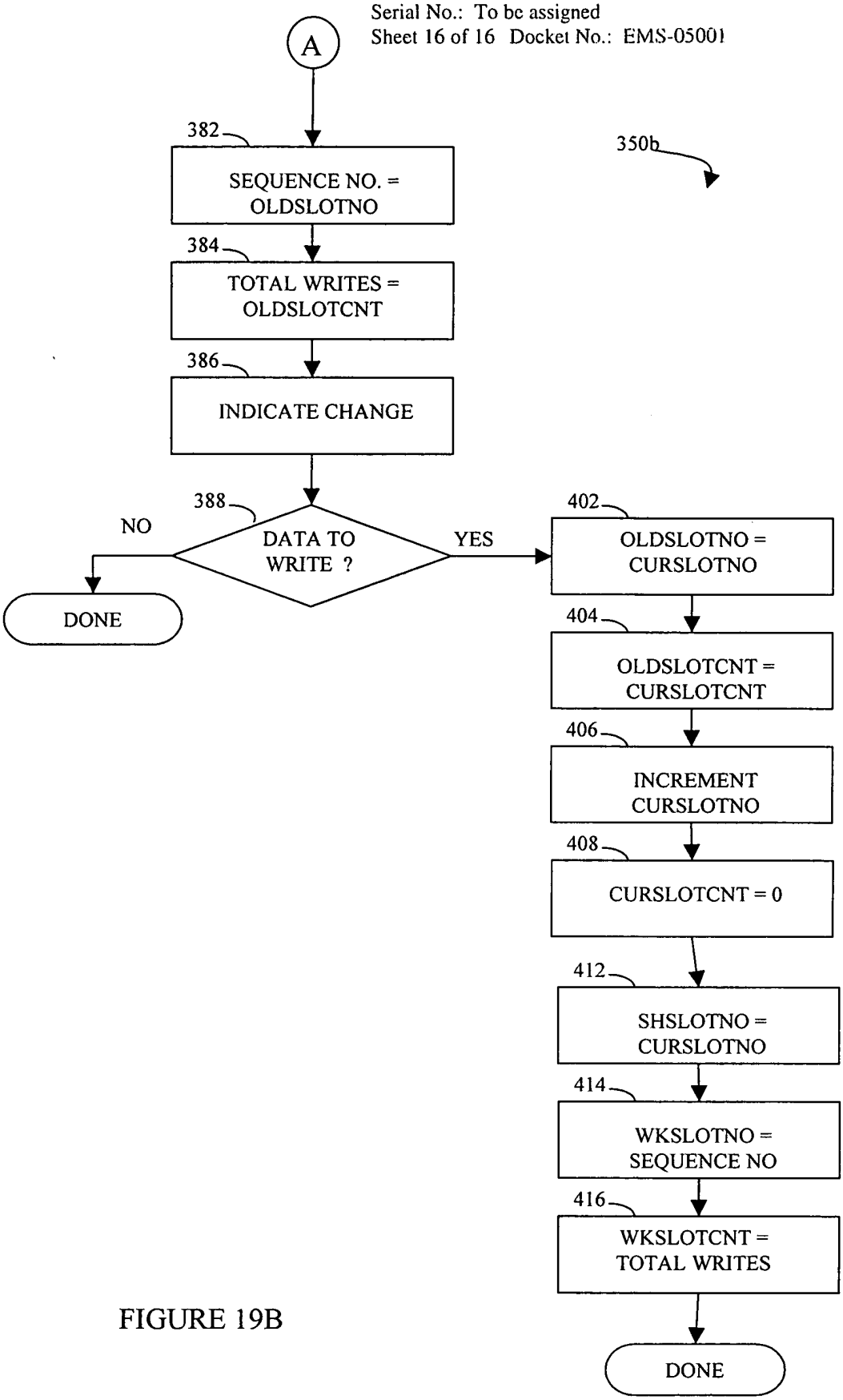
A
350b
382
SEQUENCE NO. = OLDSLOTNO
384
TOTAL WRITES = OLDSLOTCNT
386
INDICATE CHANGE
388
DATA TO WRITE ?
NO
YES
DONE
402
OLDSLOTNO = CURSLOTNO
404
OLDSLOTCNT = CURSLOTCNT
406
INCREMENT CURSLOTNO
408
CURSLOTCNT = 0
412
SHSLOTNO = CURSLOTNO
414
WKSLOTNO = SEQUENCE NO
416
WKSLOTCNT = TOTAL WRITES
DONE

FIGURE 19B